

REMARKS/ARGUMENTS***Brief Summary of Status***

Claims 1-3, 5-16, 18-22, 24-28, 30-42, 44-48, 50-54, and 56-61 are pending in the application.

Claims 1-3, 5-16, 18-22, 24-28, 30-42, 44-48, 50-54, and 56-61 are rejected.

Claim Objections

1. In the non-final office action, the Examiner states:

“Claims 33-42 and 44-46 are objected to because of the following informalities:

As per claim 33, the recitation in line 5 of claim 33 “the first and second signals” is improper, because lacks of antecedent basics; it is suggested to be changed to “the first and second symbol” (see claim 34 line 2, claim 35 line 2, claim 36 line 2 “first and second symbol”).

As per claims 34-42 and 44-46, they are objected because they depend directly or indirectly from claim 33, and claim 33 is objected.

As per claim 38, the recitation in line 4 of claim 38 “third signal” is improper, because lacks of antecedent basics; it is suggested to be changed to “third symbol” (see claim 38 line 2, claim 34 line 2, claim 35 line 2, claim 36 line 2 “first and second symbol”).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 15).

Claim Rejections - 35 U.S.C. § 112

2. In the non-final office action, the Examiner states:

“Claims 1-3, 5-16, 18-20, 27-28, 30-42, 44-48, 50-54, 56-61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 16).

Claim Rejections - 35 U.S.C. § 101

3. In the non-final office action, the Examiner states:

“Claims 1-3, 5-16, 18-22, 24-28, 30-42, 44-48, 50-54, 56-61 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 22).

Claim Rejections - 35 U.S.C. § 102

4. In the non-final office action, the Examiner states:

“Claims 1-3, 5-8, 10-11, 15-16, 18-19, 21-22, 24-25, 27-28, 30-31, 33-36, 40-42, 44-45, 47-48, 50-51 and 53-54, 56-59 are rejected under 35 U.S.C. 102(a) as being anticipated by Langlais et al. (“Synchronization in the carrier recovery of a satellite link using turbo-codes with the help of tentative decisions”, IEE Colloquium on Turbo Codes in Digital Broadcasting - Could It Double Capacity? 22 Nov. 1999 pages: 511 - 5n).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 26).

5. In the non-final office action, the Examiner states:

“Claims 1-3, 5-8, 10-11, 15-16, 18-19, 21-22, 24-25, 27-28, 30-31, 33-36, 40-42, 44-45, 47-48, 50-51 and 53-54, 56-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Mottier (“Influence of tentative decisions provided by a Turbo-decoder on the carrier synchronization: Application to 64-QAM signals”, COST 254 Workshop on Emerging Techniques for Communication Terminals, Toulouse France July 7-9, 1997, pages 326-330).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 35).

Claim Rejections - 35 U.S.C. § 103

6. In the non-final office action, the Examiner states:

“Claims 9, 13-14, 20, 38-39 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlais et al. as applied to claims I, I I, 15, 35, and 33 above in view of Divsalar (US 6023783 A), and further in view of Berrou (US 5446747 A).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 44).

7. In the non-final office action, the Examiner states:

“Claims 12, 20, 26, 32, 37, 52 and 59-61, are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlais et al. as applied to claim 11 above, and further in view of Robertson et al., “Bandwidth-Efficient Turbo Trellis-coded Modulation Using Punctured Component Codes,” IEEE Journal on Selected Areas in Communications; 0211998,.p.p. 206-218,. Vol. 16, No. 2).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 45).

8. In the non-final office action, the Examiner states:

“Claims 9, 13-14, 20, 38-39 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mottier et al. as applied to claims I,I I , 15, 35, and 33 above in view of Divsalar (US 6023783 A), and further in view of Berrou (US 5446747 A).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 48).

9. In the non-final office action, the Examiner states:

“Claims 12, 20, 26, 32, 37, 52 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mottier et al. as applied to claim 11 above, and further in view of Robertson et al., “Bandwidth-Efficient Turbo Trellis-coded Modulation Using Punctured Component Codes,” IEEE Journal on Selected Areas in Communications; 0211998, p.p. 206-218,. Vol. 16, No. 2).” (non-final office action, Part of Part of Paper No./Mail Date 20060613, p. 48).

The Applicant respectfully traverses all rejections and objections that the Examiner asserts in the non-final office action, Part of Part of Paper No./Mail Date 20060613.

The Applicant has canceled claims 1-61 and presents new claims 62-115 for examination.

As such, the Applicant respectfully requests that the Examiner withdraw all previous objections and rejections to the claims.

The Applicant respectfully believes that new claims 62-115 include subject matter that complies with the written description requirements under 25 U.S.C. § 112, first paragraph.

The Applicant respectfully believes that new claims 62-115 include subject matter that is in fact operative and therefore has utility in accordance with 35 U.S.C. § 101.

Moreover, the Applicant respectfully believes that new claims 62-115 are allowable over the Examiner cited references.

The Applicant respectfully believes that claims 62-115 are in condition for allowance and respectfully requests that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present U.S. utility patent application.

RESPECTFULLY SUBMITTED,

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